Claims

1. A peptide comprising an isolated surface exposed epitope of the Cε2 domain of IgE, or mimotope thereof.

2. A peptide as claimed in claim 1 wherein the surface exposed epitope of Cε2 is P1 (SEQ ID No. 1), or mimotope thereof.

3. A peptide as claimed in claim 1 wherein the surface exposed epitope of Cε2 is P2 (SEQ ID No. 2), or mimotope thereof.

4. A peptide as claimed in claim 1 wherein the surface exposed epitope of Cε2 is P3 (SEQ ID No. 3), or mimotope thereof.

5. A peptide as claimed in claim 1 wherein the surface exposed epitope of Cε2 is P4 (SEQ ID No. 4), or mimotope thereof.

6. A peptide as claimed in claim 1 wherein the surface exposed epitope of Cε2 is P5 (SEQ ID No. 5), or mimotope thereof.

7. A peptide as claimed in claim 1 wherein the surface exposed epitope of Cε2 is P6 (SEQ ID No. 6), or mimotope thereof.

8. A peptide as claimed in claim 1 wherein the surface exposed epitope of Cε2 is P7 (SEQ ID No. 7), or mimotope thereof.

9. A mimotope as claimed in any one of claims 1 to 8 wherein the mimotope is a peptide.

10. A peptide as claimed in claim 1 wherein the isolated epitope is derived from a loop structure of the Cε2 domain of IgE.

11. A peptide as claimed in claim 10 wherein the loop structure of the Cε2 domain of IgE is the A-B or the C-D loop.

12. A peptide as claimed in claim 2 wherein the mimotope of P1 is a peptide of the general formula: h x d h h a n a n x y;

wherein: *h* is a hydrophobic amino acid residue; *d* is an ionic bond donating amino acid residue; *a* is an acidic amino acid residue; *n* is an ionically neutral/ non-polar amino acid residue; and *x* is an amino acid.

13. A peptide as claimed in claim 2, wherein the mimotope of P1 is a peptide of the general formula:

Q, X_1, M, D, X_1, X_2, X_3

wherein X_1 is selected from V, I, L, M, F or A; X_2 is selected from D or E; and X_3 is selected from L, I, V, M, A or F.

14. A peptide as claimed in claim 2 wherein the mimotope of P1 is selected from the group comprising P15q (SEQ ID No. 11), PT1079 (SEQ ID No. 13), PT1079GS (SEQ ID No. 15), PT1078 (SEQ ID No. 16), PT15 (SEQ ID No. 8).

15. A peptide as claimed in claim 3, wherein the mimotope of P2 is P16 (SEQ ID No. 24).

16. A peptide as claimed in claim 4 wherein the mimotope of P3 is P17 (SEQ ID No. 26).

17. An immunogen for the treatment of allergy comprising a peptide or mimotope as claimed in any one of claims 1 to 16, additionally comprising a carrier molecule.

18. An immunogen as claimed in claim 17, wherein the carrier molecule is selected from Protein D or Hepatitis B core antigen.

19. An immunogen as claimed in claim 17 or 18, wherein the immunogen is a chemical conjugate of the peptide or mimotope as claimed in claims 1 to 16, or wherein the immunogen is expressed as a fusion protein.

20. An immunogen as claimed in any one of claims 17 to 19, wherein the peptide or peptide mimotope is presented within the primary sequence of the carrier.

21. A vaccine for the treatment of allergy comprising an immunogen as claimed in any one of claims 17 to 20, further comprising an adjuvant.

22. A ligand which is capable of recognising a surface exposed epitope of the Cε2 domain of IgE, characterised in that the ligand is not PTmAb0005.

23. A ligand as claimed in claim 22, wherein the ligand is PTmAb0011 deposited under the Budapest Treaty patent deposit at ECACC on 8th March 1999 under Accession No. 99030805.

24. A pharmaceutical composition comprising a ligand which is capable of recognising a surface exposed epitope of the Cε2 domain of IgE.

25. A pharmaceutical composition as claimed in claim 24 wherein the ligand is capable of recognising the C-D Loop of the Cε2 domain of IgE.

26. A pharmaceutical composition as claimed in claim 25, wherein the ligand is a monoclonal antibody selected from PTmAb0005 or PTmAb0011.

27. A peptide as claimed in any one of claims 1 to 16 for use in medicine.

28. A vaccine as claimed in claim 21 for use in medicine.

29. An immunogen as claimed in any one of claims 17 to 20, for use in medicine.

30. Use of a peptide as claimed in any one of claims 1 to 16 in the manufacture of a medicament for the treatment or prevention of allergy.

31. A ligand which is capable of recognising a surface exposed epitope of the Cε2 domain of IgE for use in medicine.

32. Use of a ligand which is capable of recognising a surface exposed epitope of the Cε2 domain of IgE in the manufacture of a medicament for the treatment of allergy.

33. Use of a ligand as clamed in claim 31 or 32, wherein the ligand is PTmAb0005 or PTmAb0011.

34. Use of PTmAb0005 or PTmAb0011 in the identification of mimotopes of P1.

35. A peptide which is capable of being recognised by PTmAb0005 or PTmAb0011.

36. An immunogen comprising a peptide as claimed in claim 35.

37. Use of a peptide as claimed in claims 1-16 in diagnostics or in the affinity purification of circulating anti-IgE antibodies from blood.

38. A method of manufacturing a vaccine comprising the manufacture of an immunogen as claimed in any one of claims 17 to 20, and formulating the immunogen with an adjuvant.

39. A method for treating a patient suffering from or susceptible to allergy, comprising the administration of a peptide as claimed in any one of claims 1 to 16, to the patient.

40. A method for treating a patient suffering from or susceptible to allergy, comprising the administration of a vaccine as claimed in claim 21 to the patient.

41. A method of treating a patient suffering from or susceptible to allergy comprising administration of a pharmaceutical composition as claimed in any one of claims 24 to 26, to the patient.

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